computing device. In such an embodiment, the GPS receiver can receive position information from one or more GPS system satellites, *e.g.*, satellite 124 of FIG. 1. The information can then be provided to the input system.

In other embodiments, the input system could utilize location information used by other devices and/or systems. For instance, embodiments of the input system could be configured to determine a user's location based on the current communication cell occupied by the user, *i.e.*, the cell location corresponding to the user's cell phone. In such an embodiment, the input system could query the user's cell phone service provider 126 to determine the user's cell location. If, however, the device implementing the input system is a cell phone, the cell phone could be adapted to receive cell information corresponding to the current cell, such as from cell tower 128, and provide the information to the input system.

Input system 110 can be implemented in software, firmware, hardware, or a combination thereof. When implemented in hardware, input system 110 can be implemented with any or a combination of various technologies. By way of example, the following technologies, which are each well known in the art, can be used: a discrete logic circuit(s) having logic gates for implementing logic functions upon data signals, an application specific integrated circuit (ASIC) having appropriate combinational logic gates, a programmable gate array(s) (PGA), and a field programmable gate array (FPGA).

When implemented in software, input system 110 can be a program that is executable by a digital computer, *e.g.*, a computer implemented as or associated with a portable computing device. An example of a portable computing device that can implement input system 110 is shown schematically in FIG. 2.

Generally, in terms of hardware architecture, portable computing device 200, *e.g.*, a laptop, of FIG. 2 includes a processor 202, memory 204, and one or more input and/or output (I/O) devices 206 (or peripherals) that are communicatively coupled via a local interface 208. Local interface 208 can be, for example, one or more buses or other wired or wireless connections, as is known in the art. Local interface 208 can include additional elements, which are omitted for ease of description. These additional elements can be controllers, buffers (caches), drivers, repeaters, and/or receivers, for example. Further, the local interface may include address, control, and/or data connections to enable appropriate communications among the components of portable computing device 200.

Processor 202 can be a hardware device configured to execute software that can be stored in memory 204. Processor 202 can be any custom made or commercially available processor, a central processing unit (CPU) or an auxiliary processor among several processors associated with the portable computing device 200. Additionally, the processor can be a semiconductor-based microprocessor (in the form of a microchip), for example.

Memory 204 can include any combination of volatile memory elements (*e.g.*, random access memory (RAM, such as DRAM, SRAM, *etc.*)) and/or nonvolatile memory elements (*e.g.*, ROM, hard drive, tape, CDROM, *etc.*). Moreover, memory 204 can incorporate electronic, magnetic, optical, and/or other types of storage media. Note that memory 204 can have a distributed architecture, where various components are situated remote from one another, but can be accessed by processor 202.

The software in memory 204 can include one or more separate programs, each of which comprises an ordered listing of executable instructions for implementing logical functions. The software in the memory 204 includes input system 110 and a

suitable operating system (O/S) 210. The operating system 210 controls the execution of other computer programs, such as input system 110. Operating system 210 also provides scheduling, input-output control, file and data management, memory management, and communication control and related services.

The I/O device(s) 206 can include input devices such as a keypad, for example. I/O device(s) 206 also can include output devices such as a display device or speaker, for example. I/O device(s) 206 may further include devices that are configured to communicate both inputs and outputs such as a touch screen display, for example. In some embodiments, one such I/O device can be a locating device 122, such as a GPS receiver, that is configured to facilitate determining a location of the portable computing device (described hereinbefore).

When the portable computing device 200 is in operation, processor 202 is configured to execute software stored within the memory 204, communicate data to and from the memory 204, and generally control operations of the portable computing device 200. Input system 110 and the O/S 210, in whole or in part, are read by the processor 202, perhaps buffered within processor 202, and then executed.

When input system 110 is implemented in software, it should be noted that the input system can be stored on any computer readable medium for use by or in connection with any computer-related system or method. In the context of this document, a computer-readable medium is an electronic, magnetic, optical, or other physical device or means that can contain or store a computer program for use by or in connection with a computer-related system or method. Input system 110 can be embodied in any computer-readable medium for use by or in connection with an instruction execution system, apparatus, or device, such as a computer-based system,